

REMARKS / DISCUSSION OF ISSUES

In the non-final Office Action dated June 23, 2010, claims 1-12, 14, and 15 are pending in the application. Claims 1, 10, and 12 are independent. Claim 13 was previously cancelled.

Claims 1, 10, 12, and 15 are amended herein. Support for these amendments are found at least at page 6, lines 5-7 and at page 6, line 20-page 7, line 5 of Applicants' specification as originally filed. No new subject matter has been added.

35 U.S.C § 103

Claims 1, 10, 12, and 15 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over US Publication Number 2003/0128658 to Walton et al. ("Walton"), in view of US Patent Number 3,987,444 to Masak et al. ("Masak").

Claims 2-9 and 11 stand rejected under 35 U.S.C. 103(a) over Walton and Masak in view of US Patent Number 6,917,820 to Gore et al. ("Gore"). Claim 14 stands rejected under 35 U.S.C. 103(a) over Walton and Masak in view of US Patent Number 4,736,455 to Matsue et al. ("Matsue").

Applicants respectfully traverse these rejections.

Claims 1, 10, and 12 are independent claims. Claims 10 and 12, although different from claim 1, include features that are similar to those discussed below from claim 1. As a result, the remarks below made with respect to claim 1 will be understood to pertain equally to claims 10 and 12 according to the particular interpretation of each claim, without further repetition herein.

Applicants' claim 1 recites, in relevant part:

the secondary station configuring its receiver resources for processing the received data and interference by choosing, based on a radio link environment between antenna pairs, selected ones of the plurality of its antennas for receiving interference signals for interference cancellation. Emphasis added.

The Office Action at page 5 admits that Walton fails to mention choosing selected ones of the plurality of its antennas for receiving interference signals for

interference cancellation. Therefore, Walton cannot suggest or disclose the feature of choosing, *based on a radio link environment between antenna pairs*, selected ones of the plurality of its antennas for receiving interference signals for interference cancellation.

In order to remedy the deficiencies in the teachings of Walton, the teachings of Masak were combined with Walton. After a careful analysis of Masak, it is now apparent that Masak fails to remedy the deficiencies in the teachings of Walton and that the combination of Masak and Walton fail to teach, show, or suggest all the features of the independent claims as amended.

Masak relates to an interference rejection system for multi-beam antennas. (Title). At column 4, lines 5-11, Masak teaches that it may be desirable to exclude from the reference signal generated in combiner 24 the coupled output of the antenna port 18 corresponding to the direction of the desired signal. To achieve this, the appropriate switch 23 may be opened while the remaining switches 23 are in the closed position.

Although Masak discloses which of its antennas may be used by opening or closing switches 23a, 23b, 23c, and 23d, Masak does not disclose or suggest choosing, *based on a radio link environment between antenna pairs*, selected ones of the plurality of its antennas for receiving interference signals for interference cancellation.

Masak's system for interference suppression is evidently based on the direction of the desired signal's origin. For example, Masak at column 3, lines 38-48 recite: "Each of the antenna ports 18 is therefore *primarily responsive to signals received from a corresponding region of space*. . . . In FIG. 1 antenna beam 16d is shown, for example, to include a main beam *primarily responsive to signals originating in (the) angular region of space 20d*. . . . Emphasis added.

In contrast to Masak, Applicants' claim 1 requires the secondary station configuring its receiver resources for processing the received data and interference by choosing, based on a radio link environment between antenna pairs, selected ones of the plurality of its antennas for receiving interference signals for interference

cancellation. As pointed out above, Masak discloses a system which selects certain antennas on the basis of the direction of the desired signal's origin. Masak, however, does not disclose or suggest choosing selected ones of the plurality of antennas for receiving interference signals for interference based on a radio link environment between antenna pairs. Therefore, Masak does not disclose or suggest the features of Applicants' claim 1.

In light of the remarks above, Applicants respectfully submit that the combination of Walton and Masak fails to teach, show, or suggest all the features of Applicants' claim 1. Accordingly, it is believed that claims 1, 10, and 12 are allowable under 35 U.S.C. §103 because the combination of Walton and Masak fails to teach, show, or suggest all the features of the independent claims. Withdrawal of the rejections to claims 1, 10, and 12 is respectfully requested.

Dependent claims 2-9, 11, 14, and 15 ultimately depend upon and incorporate all the limitations of either one of allowable claims 1, 10, and 12. Furthermore, each dependent claim includes additional distinguishing limitations. For each dependent claim, Applicants repeat the above arguments from claim 1 and apply them to the respective dependent claim. The additional cited references do not cure the deficiencies of the combination of Walton and Masak, as noted with respect to the independent base claim. Thus, Applicants respectfully submit that dependent claims 2-9, 11, 14, and 15 are allowable at least by virtue of their dependency on an allowable parent claim.

In addition, claim 15 recites the features of: "the secondary station configuring its receiver resources for processing the received data and interference by choosing, based on characteristics of channel transfer functions between interference sources and the secondary station antennas, selected ones of the plurality of its antennas for receiving interference signals for interference cancellation."

As discussed above, Walton does not suggest choosing selected ones of the plurality of its antennas for receiving interference signals for interference cancellation. Masak does not disclose or suggest choosing selected ones of the plurality of antennas for receiving interference signals for interference based on

characteristics of channel transfer functions between interference sources and the secondary station antennas. Thus, the combination of Walton and Masak fails to teach, show, or suggest all the features of Applicants' claim 15.

Applicants respectfully submit that the rejections of claims 1-12, 14, and 15 under 35 U.S.C. §103(a) have been traversed and should be withdrawn.

Conclusion

In view of the foregoing, Applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If there are any errors with respect to the fees for this response or any other papers related to this response, the Director is hereby given permission to charge any shortages and credit any overcharges of any fees required for this submission to Deposit Account No. 14-1270.

Respectfully submitted,

/Brian S. Myers/

By: Brian S. Myers
Registration No.: 46,947
973-401-7157
For: Kevin C. Ecker
Registration No.: 43,600
914-333-9618

Please direct all correspondence to:

Kevin C. Ecker, Esq.
Philips Intellectual Property & Standards
P.O. Box 3001
Briarcliff Manor, NY 10510-8001